COMMENTS AND RESPONSES TO RULE 325 (note: legally these comments do not have to be addresses until 30 days after the public hearing per A.R.S.§ 49-471.07

COMMENT #1: We request that the subject Rule not be issued without better control requirements for particulate and other pollution.

RESPONSE #1: Rule 325 is a rule that controls particulate matter emissions from the tunnel kilns stacks. Rule 316 is the rule that addresses dust emissions from clay processing. Rule 325 incorporates the same standards that EPA has chosen for the Maximum Achievable Control Technology (MACT) standard. By adopting this rule, the county incorporates Best Available Control Measures (BACM) and Most Stringent Measures (MSM) proposed in the Salt River PM-10 Implementation Plan (SIP). Should testing indicate that the kilns emit more than the limit of 0.42lb of particulate /ton of product, then additional controls will be required under Rule 325.

COMMENT#2: Rule 325 mentions a maximum emission of 0.42 lbs. of particulate per ton of product. How many micrograms/cubic meter of PM 10 and PM 2.5 does this mean at the property line of this facility?

RESPONSE #2: This question will be answered the week of August 8th. since modeling for this particular process must be performed to answer this question.

COMMENT#3: Why isn't a baghouse used?

RESPONSE #3: The clay processing operation is controlled by a baghouse. The kilns operate in order to fire brick which is a curing operation, not incineration or material reduction.

COMMENT #4: Set up a particulate monitor**.**

RESPONSE#4: It is not economically cost effective for facilities of this site to be required to do fenceline monitoring for particulates. To do so would require more than one monitor and the monitors would not be able to distinguish particulates emitted by Phoenix Brick from reintrained road dust. Phoenix Brick permit conditions require that the facility record opacity readings on a daily basis and contain the following permit conditions:

1. Limit stack emissions to 7 percent opacity containing less than 0.02 gr/dscf of particulate matter (50 mg/dscm).
2. Limit fugitive dust emissions from any transfer point on a conveying system to 7 % opacity.
3. Fugitive dust emissions below 15% opacity from any crusher.
4. Fugitive dust emissions below 10% from any affected process source or any affected operation, excluding truck dumping directly into any screening operation, feed hopper or crusher.
5. Fugitive dust emissions below 20% opacity from truck dumping directly into any screening operation, feed hopper or crusher.

COMMENT#5: We have data that shows that numbers specified in permits or rules don't indicate what the real pollution level is.

RESPONSE#5: Permits and rules specify emission levels not ambient concentrations.

COMMENT#6: What temperatures are involved?

RESPONSE#6: The bricks are loaded onto kiln cars and moved in thru a 300° F dryer. They then are fired in the kiln at 1900° F for 33 hours.

COMMENT#7: Why aren't VOC's of interest?

RESPONSE#7: This source is not a major source of volatile organic carbon. VOCS have not been a major source of pollution in this industry. The sources of VOC are mostly from the fuel used in the curing and drying processes since the brick manufacturing process is mostly an inorganic one (no carbon compounds used except maybe some naturally occurring lignosulfates). Since Phoenix Brick uses natural gas the amount of VOC is low compared to fuel oils.

The other source of VOC is the extrusion or lube oil that they use to surround the bricks before curing. The permit limits its vapor pressure to be less than or equivalent to the vapor pressure of Unocal 76 Unax AW32, a lube oil with a very low volatility and a flash point of 374° F. Therefore the oil would not be released at the 300° F temperature in the dryer. For cleanup of equipment the source is mandated to using products that contain less than 10% organics.

COMMENT#8: What are the hours of operation?

RESPONSE#8: 24 hours.

COMMENT#9: Does this plant run at night**?** It shouldn't be allowed to run unless opacity measurements are taken.

RESPONSE#9: The kilns do operate at night as they fire the bricks for 33 hours. The kilns operate in order to cure the brick. The County has not required continuous opacity meters for baking and curing activities. The County requires continuous emission monitors for activities which reduce material by burning it off, not curing. The complaints from the neighborhood regarding the kilns have mainly been about odors, and a burning sensation. The opacity complaints that the department has recorded concerning the dust emissions have been from the clay handling. The County has investigated the complaints and the appropriate action was taken.